

ABSTRACT OF THE DISCLOSURE

Apparatus and methods are provided for allowing two graphics controllers to cooperate on a single screen and for modifying the AGP protocol to provide symmetric capabilities for both AGP targets and AGP masters. According to one embodiment of the present invention, an Accelerated Graphics Port (AGP) master may initiate a data transaction. A graphics controller receives an AGP transaction request from a core logic device. The graphics controller buffers the AGP transaction request in a request queue. Then, the graphics controller initiates a data transaction in response to the AGP transaction request. According to another embodiment of the present invention, an AGP target may issue AGP transaction requests. The integrated graphics controller issues an AGP transaction request to a graphics controller residing on an expansion card. Subsequently, the integrated graphics controller receives an indication on a status bus that the graphics controller residing on the expansion card is ready to initiate a data transaction in response to the AGP transaction request. If the AGP transaction request is an AGP read transaction, then the integrated graphics controller receives read data from the graphics controller. Otherwise, if the AGP transaction request is an AGP write transaction, then the integrated graphics controller sources write data to the graphics controller residing on the expansion card.